

Financial Econometrics meets Machine Learning

October 23-24, 2025 — Rotterdam **Econometric Institute, Erasmus School of Economics** 

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## **Timetable**

## **Thursday, October 23**

8:30-9:00	Registration with coffee			
9:00-9:05	Welcome			
09:05-10:05	К	<b>Patrick Gagliardini</b> University of Lugano, Switzerland Theil CT-1	Chair: Olivier Scaillet	
10:05-10:30	Coffee break			
10:30-11:45	PS	Session 1: Portfolio choice Theil C1-3	Chair: Rasmus Lönn	
		Session 2: Macro-finance Theil C1-4	Chair: Maria Grith	
11:45-13:20	Lunch and Poster session			
13:20-14:35	PS	Session 3: Forecasting Theil C1-3 Session 4: SDF Theil C1-4	Chair: Mariia Artemova Chair: Onno Kleen	
14:35-15:00	Coffee break			
15:00-16:40	PS	Plenary session Theil CT-1	Chair: Alberto Quaini	
16:40-17:10	Coffee break			
17:10-18:10	К	<b>Maryam Farboodi</b> MIT, USA Theil CT-1	Chair: TBD	
19:00	Conference dinner			

K: Keynote, 50min presentation/10min Q&A PS: Parallel or Plenary session, 20min presentation/5min Q&A

## Friday, October 24

8:30-9:00	Coffee			
09:00-10:00	К	<b>Yacine Ait-Sahalia</b> Princeton University, USA Theil CT-1	Chair: Fabio Trojani	
10:00-10:30		Coffee break		
10:30-12:10	PS	Session 5: Option pricing Theil C2-1	Chair: Evgenii Vladimirov	
		Session 6: Big data Theil C2-2	Chair: Alberto Quaini	
12:10-13:40		Lunch		
13:40-14:55	PS	Session 7: Asset pricing 1 Theil C2-1	Chair: Rasmus Lönn	
		Session 8: Volatility Theil C2-2	Chair: Evgenii Vladimirov	
14:55-15:20		Coffee break		
15:20-17:00	D PS	Session 9: Theoretical ML Theil C2-1	Chair: Onno Kleen	
		Session 10: Asset pricing 2 Theil C2-2	Chair: Gustavo Freire	
17:00-17:30		Coffee break		
17:30-18:30	К	Andrea Vedolin Boston University, USA Theil CT-1	Chair: TBD	
18:30-20:00	Reception drinks and snacks			

K: Keynote, 50min presentation/10min Q&A PS: Parallel session, 20min presentation/5min Q&A

### **Sessions**

### **Keynotes**

- 1. Patrick Gagliardini. Extracting Statistical Factors when Betas are Time Varying
- 2. Maryam Farboodi. Do Market Believe in Transformative AI?
- 3. Yacine Ait-Sahalia. SoFiE Invited Lecture: So Many Jumps, So Little News
- 4. Andrea Vedolin. Expectations and Asset Prices

#### **Parallel Sessions**

#### 1. Portfolio Choice:

- a) **Fabio Trojani**. A comprehensive machine learning framework for dynamic portfolio choice with transaction costs
- b) **Paolo Guasoni**. Evaluating and Mitigating Transaction Costs with Recurrent Neural Networks
- c) Andre B.M. Souza. How to Bet on Winners (and Losers)

#### 2. Macro-Finance:

- a) Sicco Kooiker. Self-driving neural networks for yield curve modelling
- b) Lukas Vacha. The Dynamic Persistence of Economic Shocks
- c) **Jens Kvaerner**. How and Why Has the Term Structure of Equity Risk Premia Changed Over 150 Years?

#### 3. Forecasting:

- a) Elliot Beck. Forecasting Inflation With the Hedged Random Forest
- b) Eghbal Rahimikia. Re(Visiting) Large Language Models in Finance
- c) Rehim Kilic. Virtue or Vice? Complexity and Exchange Rate Predictability

#### 4. **SDF**:

- a) Hao Ma. Transaction Cost-Aware Stochastic Discount Factors
- b) Emanuele Luzzi. Learning the Pricing Kernel via Nonparametric Option Portfolios
- c) **Stefan Voigt**. Uncertainty everywhere: integrating conceptual uncertainty in the stochastic discount factor

#### 5. Option Pricing:

- a) Onno Kleen. Equity option prices and firm characteristics
- b) Carsten Chong. Do Equity and Options Markets Agree about Volatility
- c) Maria Grith. Oblique Forests with Local Linear Leaves for Equity Option Implied Volatility Forecasting
- d) **Tobias Sichert**. Betting on Stocks with Options?

#### 6. Big Data:

- a) **Wei Miao**. High-dimensional censored MIDAS logistic regression for corporate survival forecasting
- b) **Enzo D'Innocenzo**. Score-Driven High-Dimensional Approximate Dynamic Factor Models: Estimation and Inference
- c) Jihyun Kim. Heavy Factor Models
- d) **Daniele Massacci**. Estimation and Inference in Large Dimensional Threshold Factor Models with Weaker Loadings

#### 7. Asset Pricing 1:

- a) **Daniele Bianchi**. Weak Signals, Small Bets: A Portfolio Perspective on Firm Characteristics
- b) Cisil Sarisoy. Testing Model-Based Contributions in Misspecified Asset Pricing Models
- c) Attila Sarkany. Tailoring the Portfolio Choice: Time to Move Beyond the Average

#### 8. **Volatility:**

- a) Alev Atak. High-Frequency Behavioral Signals of Volatility: Financial Literacy and Tone Divergence
- b) **Serge Nyawa**. A Multi-dimensional Perspective in Connecting Threshold Models and Trees' Regressions for Covolatility Matrix Forecasting
- c) Pedro Valls Pereira. Forecasting Intraday Volatility and Densities using Deep Learning

#### 9. Theoretical Machine Learning:

- a) Christos Revelas. When do Random Forests work?
- b) Mehmet Caner. A general class of model-free dense precision matrix estimators
- c) **Philippe Goulet Coulombe**. Dual Interpretation of Machine Learning Forecasts
- d) **Ruixun Zhang**. Diffusion Factor Models: Generating High-Dimensional Returns with Factor Structure

#### 10. Asset Pricing 2:

- a) Shuhua Xiao. Schrödinger's Sparsity in the Cross-Section of Stock Returns
- b) **Dennis Umlandt**. Time-Varying Factor Risk Premia: A GMM-Based Filtering Approach
- c) Junye Li. Dynamic Currency Mispricing and Arbitrage Profits
- d) Daniel Buncic. Simplified: A Closer Look at the Virtue of Complexity in Return Prediction

### **Plenary Session**

- 1. Paul Schneider. Joint Estimation of Conditional Mean and Covariance for Unbalanced Panels
- 2. Damir Filipovic. Kernel Density Machines
- 3. Elvezio Ronchetti. A 30 Year Journey On the Paths of Steepest Ascent
- 4. **Olivier Scaillet**. Green Silence: Double Machine Learning Carbon Emissions Under Sample Selection Bias

#### **Posters**

- 1. Ali Moin. Global News Networks and Return Predictability
- 2. Aaron Stefan Popa. One Global Yield Curve Model to Rule Them All
- 3. Matteo Valle. Environmental Regulation Risk and Asset Prices
- 4. **Dennis Umlandt**. Common Factors in Currency Characteristics
- 5. **Oliver Budras**. Conformal Prediction Premium: Estimating Uncertainty in Machine-Learning Return Predictions
- 6. **Simon Trimborn**. The Geographic Origins of Blockchain Transactions
- 7. Hélène Mathurin. Pricing of Green Regulatory and Technological Risks
- 8. Lukáš Janásek. Gradient-Based Reinforcement Learning for Dynamic Quantile Models
- 9. **Diana Komis**. Portfolio Optimization Using Minimum Spanning Tree Combined with Adaptive Graph Convolutional Recurrent Networks
- 10. **Jiaxun Liu**. Macroeconomic Factors in Bond Risk Premia: Quantile Machine Learning and Factor Analysis
- 11. Luuk de Wit. Clustering-Based Estimation of Score-Driven Models for Extremes

### **Useful Information**

**Talks** will be held at the **Theil building** on both Thursday and Friday, situated in the Erasmus University campus. The campus map can be found in the next page.

The **poster session** will be held on Thursday (day 1) during lunch in the main hall of **Theil building**. This is also where the **registration** will take place earlier in the morning.

**WiFi** will be available during the conference. For each day, we will provide you with a guest Wi-Fi day code. You should SMS the code to the telephone number +31 6 3574 4774. Then, you will receive a login name and password valid for the whole day to connect to the eduroam WiFi network.

The **conference dinner** will be held at the **De Machinist**, at Willem Buytewechstraat 45, 3024 BK. We will meet at 18:10 of day 1 at the main entrance of the Theil building to go together to the restaurant by metro. The directions can be found below. Credit card can be used to pay for the metro via contactless payment. There is also (paid) parking space available at the restaurant for those going by car.

### How to get to the Erasmus University campus?

The Erasmus University campus, situated at Burgemeester Oudlaan 50, 3062 PA, can be easily reached by public transportation (subway or tram). From Rotterdam Central Station:

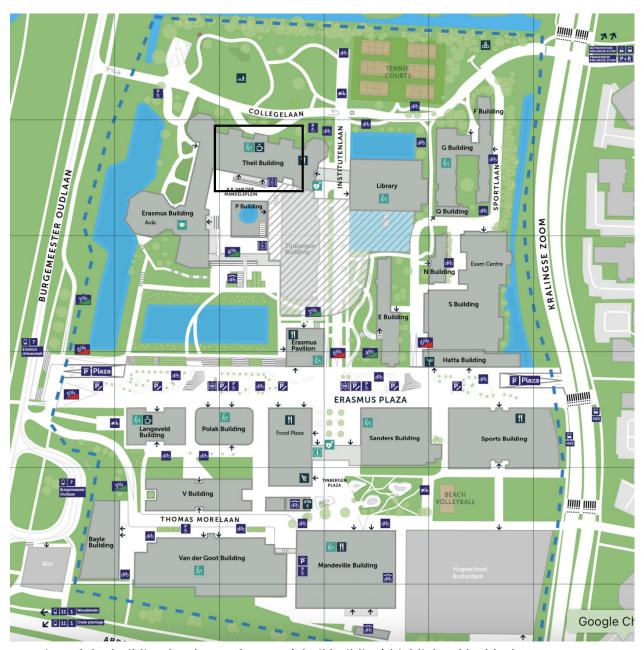
- Tram 7, direction Woudestein, stop at 'Erasmus Universiteit'.
- Tram 1 or 11, direction De Esch, stop at 'Woudestein'.
- Subway, direction Slinge. Transfer at Beurs, to subway in the direction of Binnenhof, Nesselande or De Terp. Get off the subway at station Kralingse Zoom. This subway is within walking distance (10 minutes) of the campus.

The campus is near the A16 and is also easily accessible by car (there is paid parking available). On the A16, from both directions, take exit 25 (Centrum). Follow the signs 'Centrum'. Turn right at the traffic lights (Burgemeester Oudlaan). You find the campus on the right-hand side.

We are looking forward to welcoming you in Rotterdam!

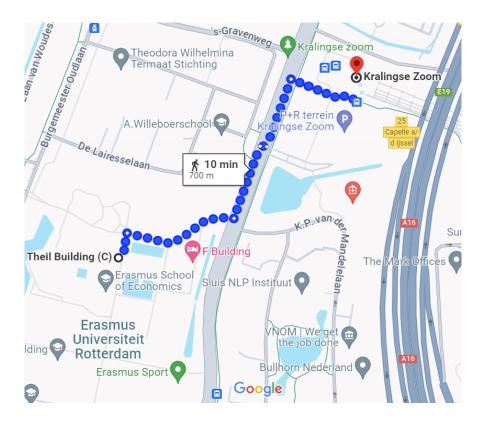
Mariia Artemova Gustavo Freire Maria Grith Onno Kleen Rasmus Lönn Alberto Quaini Anastasija Tetereva Evgenii Vladimirov

### **Campus Map**



Location of the building for the conference (Theil building) highlighted by black square.

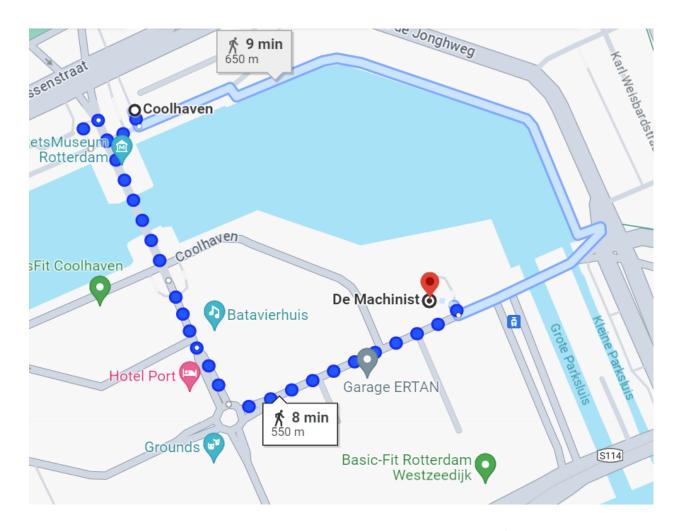
#### **Directions to Conference Dinner**



At 18:10h of day 1, we meet at the main entrance of the Theil building and go to the conference dinner by metro. The map above shows the 10-minute walk to the Kralingse Zoom metro station.



From Kralingse Zoom, we take any of the Metro lines A, B or C in the direction of the city center. We drop off at the Coolhaven station.



From the Coolhaven station, we walk for 8 minutes to the restaurant (De Machinist, Willem Buytewechstraat 45, 3024 BK).

# **Partner Institutions and Sponsors**









